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⑷ Solid state microlaser.

⑸ A solid state gain medium (32) is disposed between two mirrors (34, 36) to form a resonant cavity, the cavity length selected so that the gain bandwidth (12, 14) of the gain medium is less than the frequency separation of the cavity modes (16-24). By selecting this cavity length, only a single longitudinal mode will oscillate when the laser operates in a single transverse mode. The microlaser is optically pumped by any appropriate source such as a semiconductor injection laser or laser array. Suitable gain media are Nd:YAG and Nd pentaphosphate.

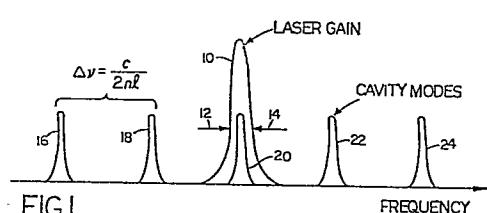


FIG.1



EP 89 30 0926

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
A	REV. ECL, vol. 26, no. 9/10, September/October 1978, pages 1111-1128; M. SARUWATARI et al.: "Electroluminescent diode pumped miniaturized LiNdP4O12 lasers" * Page 1111; page 1125; figure 16 * ---	1-13	H 01 S 3/06 H 01 S 3/094
A	DIGEST OF TECHNICAL PAPERS, TOPICAL MEETING ON INTEGRATED OPTICS, New Orleans, Louisiana, 21st - 24th January 1974, pages MB7-1-MB7-4, Optical Society of America; D. CASTLEBERRY et al.: "A single mode 2.06 mum miniature laser" * Whole document * ---	1-13	
P, A	US-A-4 797 893 (G.J. DIXON) * Columns 3,4; figures 1,2 * -----	1-13	

TECHNICAL FIELDS
SEARCHED (Int. Cl. 4)

H 01 S

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	11-08-1989	MALIC K.
CATEGORY OF CITED DOCUMENTS		
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		